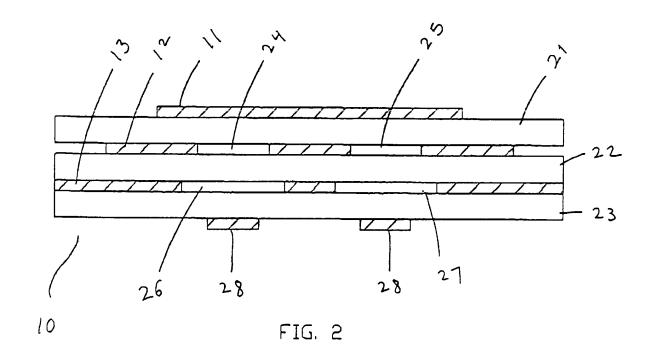


FIG. 1



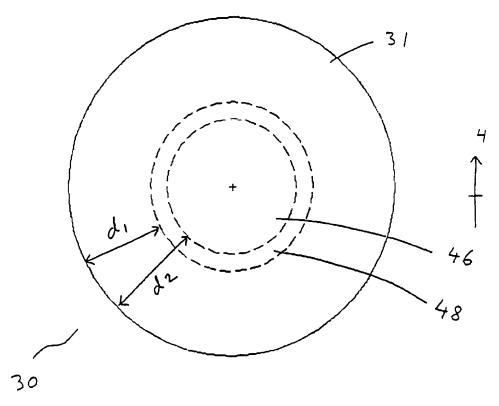
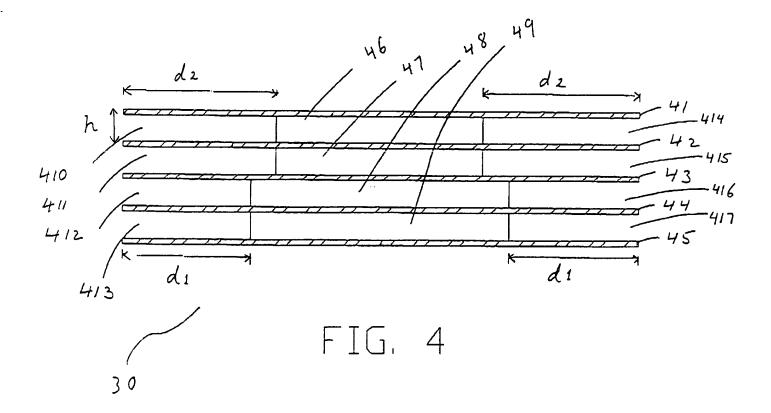


FIG. 3



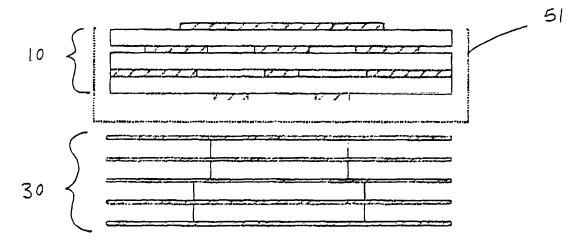


FIG. 5

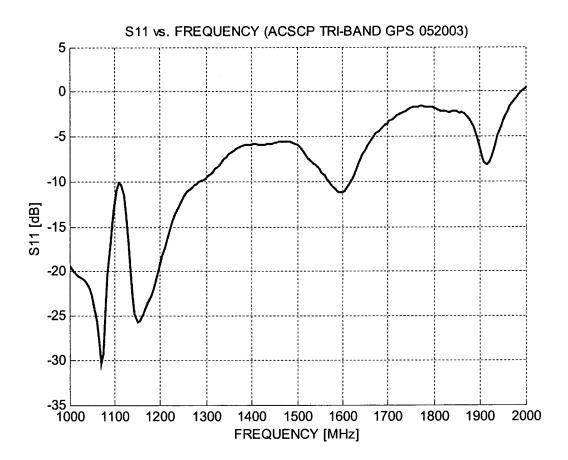


FIG. 6

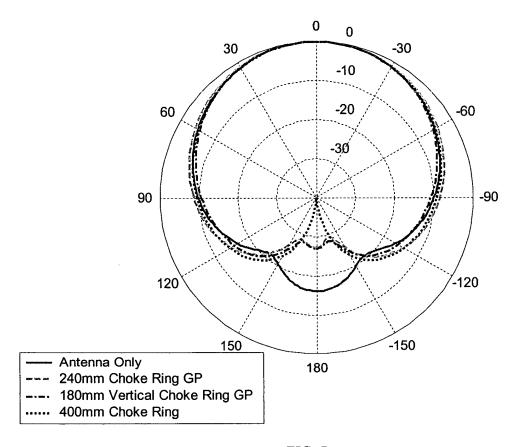


FIG. 7

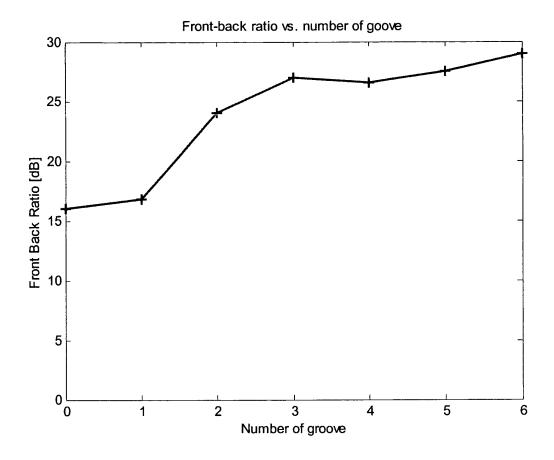


FIG. 8

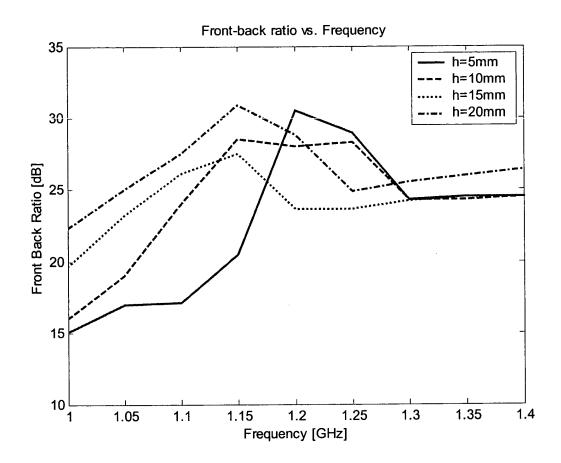


FIG. 9

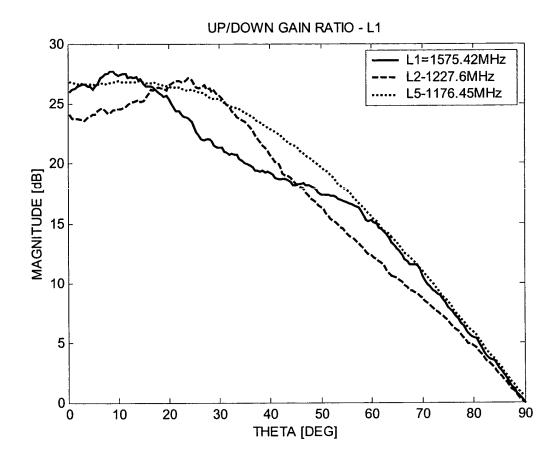


FIG. 10

| Radius of the PEC plates (mm) | Depth (mm) | Depth (wavelength @ 1.1GHz) | Front/Back ratio (dB) |
|-------------------------------|------------|--------------------------------|-----------------------|
| Antenna Only | | | 16 |
| 90 | 68.25 | 0.25 | 21 |
| 90 | 65 | 0.24 | 22 |
| 90 | 60 | 0.22 | 20 |
| 90 | 55 | 0.20 | 23 |
| 90 | 50 | 0.18 | 27.5 |
| 90 | 45 | 0.165 | 24 |

TABLE 1